

IN THE CLAIMS:

1. (currently amended) A method allowing a remote party to research the in-tank fuel levels of the bulk fuel tanks of a distributed population of retail fuel stations to provide at least one remote party with a "snapshot" of the in-tank fuel levels of the bulk fuel tanks of all the retail fuel stations in said population as well as data obtained from some other on-premise device or sensor, comprising the steps of:

configuring a distributed population of retail fuel stations as data-origin parties of in-tank fuel level data from the on-premise bulk fuel tanks as obtained from controllers of automated tank gauges (ATG's) as well as being an origin of data obtained from some other on-premise device or sensor;

providing each data-origin party with an on-premise data communicator that has a processor and memory and is associated with and cyclically polls at least one on-premise ATG controller and at least one on-premise some other device or sensor for data thereof, and pre-programmed with a cyclic schedule and stores locally in the memory at least one cycle's several cycles worth of such polled data;

providing a communications network having intermediate storage and a given message-switching message-propagating technology;

providing a data-destination party with a message-switching address;

each data communicator cyclically-propagating in the population programmed with a schedule containing appointed times such that at any given appointed time, each independently but essentially simultaneously executes an instruction set for the propagation of a data message over the communications network by means of the given message-switching message-propagating technology and as addressed to the data-destination party, which data message contains a historical record of the polled data of at least the current cycle and as polled from the associated at least one on-premise ATG controller and at least one on-premise some other device or sensor; whereby, after some time lapse that affords the data messages of the population opportunity to propagate their own independent way through the network and reach, not all at the same instant, the address of the data-destination party, then the data-destination party affords research into the data on a "snapshot" basis for that given time, and successively, for successive given times.

2. (original) The method of claim 1 wherein any given associated at least one other device or sensor is corresponded with a non-petroleum metric of the retail fuel station.

3. (original) The method of claim 2 wherein the non-petroleum metric comprises any of proof-of-sales records, cooler temperature, a cathodic protection system, a door alarm, or ambient temperature.

4. (original) The method of claim 1 wherein any given associated at least one other device or sensor is corresponded with either proof-of-sales or dispenser records which thereby affords reconciliation with fuel depletion metrics obtained from the data of the respectively associated at least one ATG controller.

5. (original) The method of claim 1 wherein the communications network comprises the Internet global computer network.

6. (original) The method of claim 5 wherein the message-switching message-propagating technology comprises at least SMTP e-mail technology or a competitive analog thereto.

7. (original) The method of claim 5 wherein the intermediate storage comprises at least the data storage devices of ISP's.

8. (original) The method of claim 1 further comprising the steps of the data communicators of the data-origin parties receiving communications across the communications network from a party authorized to do so containing instructions to change message-propagating scheduling.

9. (original) The method of claim 1 wherein the data-destination party comprises any of a wholesaler, a dispatcher, an equipment vendor or a remote business office of the management over at least one retail fuel station.

10. (canceled)

11. (currently amended) The method of claim 1 wherein parties ~~eyecially~~ periodically contact a selected time server over the communications network in order to coordinate time accurately among themselves.

12. (canceled)

13. (new) A method allowing a distributed population of retail fuel stations to propagate messages over the Internet global computer network by message-switching message-propagating technology in order to inform at least one remote party of the in-tank fuel levels of the bulk fuel tanks of all the retail fuel stations, comprising the steps of:

configuring a distributed population of retail fuel stations as data-origin parties of in-tank fuel level data from the on-premise bulk fuel tanks as obtained from controllers of automated tank gauges (ATG's) as well as being an origin of data obtained from some other on-premise device or sensor;

providing each data-origin party with an on-premise data communicator that has a processor and memory and is associated with and polls at least one on-premise ATG controller and at least one on-premise some other device or sensor for data thereof, and pre-programmed with a cyclic schedule and stores locally at least one cycle's worth of such polled data;

providing each on-premise communicator with a connection to the Internet global computer network including the intermediate storage capacity inherent thereto and at least one given message-switching message-propagating technology associated therewith;

providing a data-destination party with a message-switching address;

each data communicator cyclically propagating a data message over the network by means of the given message-switching message-propagating technology and as addressed to the data-destination party, which data message contains a historical record of the polled data of at least the current cycle and as polled from the associated at least one on-premise ATG controller and at least one on-premise some other device or sensor.

14. (new) The method of claim 13 wherein any given associated at least one other device or sensor is corresponded with a non-petroleum metric of the retail fuel station comprising any of proof-of-sales records, cooler temperature, a cathodic protection system, a door alarm, or ambient temperature.

15. (new) The method of claim 13 wherein any given associated at least one other device or sensor is corresponded with either proof-of-sales or dispenser records which thereby affords reconciliation with fuel depletion metrics obtained from the data of the respectively associated at least one ATG controller.

16. (new) The method of claim 13 wherein the message-switching message-propagating technology comprises at least SMTP e-mail technology or a competitive analog thereto; and the intermediate storage capacity inherent to the Internet system of global computer inter-networked networks comprises at least the data storage devices of ISP's.

17. (new) The method of claim 13 further comprising:
pre-programming all the data communicators with a same periodic schedule to follow in matters of when to propagate data to the data destination party(ies) as well as in matters of periodically contacting a selected time server over communications network in order to coordinate time accurately among themselves, whereby periodically, according to the periodic schedule, all the data communicators essentially simultaneously launch a data message onto the network which affords the data-destination party(ies) to essentially re-construct a "snap-shot" of the data, after arrival of all the current period's data messages allows that.

18. (new) A method of pushing the data of the in-tank fuel levels of the bulk fuel tanks of a distributed population of retail fuel stations across a network to at least one data-destination party for such data, comprising the steps of:

configuring a distributed population of retail fuel stations as data-origin parties of in-tank fuel level data from the on-premise bulk fuel tanks as obtained from controllers of automated tank gauges (ATG's);

providing each data-origin party with an on-premise data communicator that has a processor and memory and is associated with and cyclically polls at least one on-premise ATG controller, and pre-programmed with a cyclic schedule and stores locally a historical record of at least several of the last cycles' worth of such polled data;

providing a communications network having intermediate storage and a given message-switching message-propagating technology;

providing a data-destination party with a message-switching address;

each data communicator periodically propagating a data message over the communications network by means of the given message-switching message-propagating technology and as addressed to the data-destination party, which data message contains the data of the at least last-in-time cycle as polled from the associated at least one on-premise ATG controller.

19. (new) The method of claim 18 wherein the communications network comprises the Internet system of global computer inter-networked networks, the message-switching message-propagating technology comprises at least SMTP e-mail technology or a competitive analog thereto, and the intermediate storage is inherent to the Internet system of global computer inter-networked networks and includes at least the data storage devices of ISP's.

20. (new) The method of claim 18 further comprising:

pre-programming all the data communicators with a same periodic schedule to follow in matters of when to propagate data to the data destination party(ies) as well as in matters of periodically contacting a selected time server over communications network in order to coordinate time accurately among themselves, whereby periodically, according to the periodic schedule, all

the data communicators essentially simultaneously launch a data message onto the network which affords the data-destination party(ies) to essentially re-construct a "snap-shot" of the data, after arrival of all the current period's data messages allows that.

21. (new) The method of claim 18 wherein the data communicators are pre-programmed to combine a history of several cycles-worth of polled data in each data message.

22. (new) The method of claim 18 wherein the data communicators are further configured to poll cyclically at least some other on-premise data-supplying device or sensor for some non-petroleum metric of the retail fuel station, comprising any of proof-of-sales records, dispenser records, cooler temperature, a cathodic protection system, a door alarm, or ambient temperature; whereby either proof-of-sales or dispenser records thereby affords reconciliation with fuel depletion metrics obtained from the data of the respectively associated at least one ATG controller.